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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,638	11/18/2003	Dan Forsberg	59864.00528	3251

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SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

NOBAHAR, ABDULHAKIM

ART UNIT PAPER NUMBER

2132

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,638

Applicant(s)

FORSBERG, DAN

Examiner

Abdulahkim Nobahar

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. This communication is in response to applicants' amendment received on September 12, 2005.

2. Applicant's arguments with respect to the rejection(s) of claim(s) 1-48 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the claim amendments.

Specification

The disclosure is objected to because of the following informalities:

- 1- Many of the acronyms such as DIAMETER, AVP, EAP, UE and so on are not described in the specification. Appropriate correction is required.
2. Acronyms are used so extensively on pages 3 through 10 so that it makes the descriptions confusing and incomprehensible. Appropriate correction is required.
3. The limitation "a phase of the establishing of the secure tunnel, wherein the phase is determined based on a protocol or authentication method" recited in claim 1, 31 and 40 has been described insufficiently in such a short paragraph in the specification (see page 21, paragraph [0069]) so that almost fails to comply with the enablement requirements. Further elaboration is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al (2002/0174335 A1; hereinafter Zhang) in view of Palekar et al (US 20030226017 A1; hereinafter Palekar).

Regarding claims 1-3, 6-8, 31-33, 36 and 40-42, Zhang discloses a method for providing authentication, authorization and accounting (AAA) transactions in a wireless network (see, for example, abstract and [0028]). Zhang discloses that a mobile terminal (MT) receives services from an Internet service provider (ISP) having an authentication server through an access point (AP) (corresponding to the recited access network) with a server (see, for example, Fig. 1 and [0073]). Zhang also discloses that a secure channel (i.e., secure tunnel) is established between the MT and the AP (see, for example, [0025], [0026], [0043] and [0045]). Zhang further discloses that in one embodiment IPSEC is used for per-packet encryption between a MT and an AP (see, for example, [0029], [0067] and [0068]). In this embodiment every packet is encrypted and authenticated. As Fig. 2 and the procedure explained at [0073] through [0082] demonstrate that all transmitted messages are encrypted (corresponding to the recited establishing of the secure tunnel) while (corresponding to the recited at least partially

simultaneous) authentication of a MT is being performed. This means that authentication process starts right after a secure channel is established. However, Zhang does not expressly disclose that establishing a secure tunnel is determined based on a protocol or an authentication method.

Palekar discloses an efficient method for establishing a secure communication between two endpoints such as a wireless client and a network entity which consist of two phases of establishing a secure tunnel and authenticating the wireless client (see, for example, [0008]-[0010]; [0042]; [0053]). Palekar further discloses that for the purpose of establishing the secure tunnel between the two endpoints either the authentication method is negotiated (see, for example, [0063]; [0069]) or the protocol used for communication (see, for example, [0070]; [0071]; [0109]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement a scheme of selecting a protocol or a method of authentication prior to establishing a secure tunnel as taught in Palekar in the method of Zhang, because it would provide for protection of the communication from a ^{man in the} ~~man in the~~ interceptor (Palekar, [0007]; [0008]; [0051]).

Regarding claims 4-5, 34-35, 39, 43-44 and 48, Zhang discloses that the preferred embodiment of his invention provides a mechanism to prevent a denial of service attack by a hacker during the authentication of a user after establishing a secure channel. This is done by APs making intelligent decision while relaying user authentication certificate (corresponding to the recited a request for an identification of

Art Unit: 2132

the user equipment). Zhang also discloses that IPSEC is used for the communication between the user and AP to ensure data integrity (corresponding to the recited a request for capability of the user equipment to support at least one data protocol) (see, for example, [0065]-[0067]).

Regarding claims 9-10 and 45, Zhang discloses that both the AP and the service provider (i.e., an ISP) each include a server in their networks (see, for example, [0055] and [0073]).

Regarding claims 11-20, 37 and 46, Zhang discloses that the messages transmitted between a mobile user and an AP network are encrypted (corresponding to the recited the secure tunnel is established) and the communication is performed between the mobile user equipment and a server that is included in the AP network (see, for example, [0045], [0073] and Fig. 2, NASP).

Regarding claims 21-23, 26-27, 38 and 47, Zhang discloses that a mobile user connection with an AP network is a wireless connection (see, for example, [0055]).

Regarding claims 24-25, these claims are rejected as applied to the like elements of claims 4 and 5 as stated above.

Regarding claims 28-30, Zhang discloses that a roaming user accesses an ISP or a home network through a local network (i.e., an access or visited network) see, for example, [0047], [0051] and [0060]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 20030212893 A1 to Hind et al.

US 20030159044 A1 to Doyle et al.

US 5237612 A to Raith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdulhakim Nobahar whose telephone number is 571-272-3808. The examiner can normally be reached on M-T 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2132

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abdulhakim Nobahar
Examiner
Art Unit 2132 *a.n.*

November 22, 2005

Gilberto Barron Jr.
GILBERTO BARRON JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100